Example of Revenue Decoupling

Utah Committee of Consumer Services
Witness: David Dismukes
Docket No. 05-057-T01
CCS Exhibit 1.1

Allowed Revenue per Customer (Annual)

Current Non-Gas Revenue \$ 150,000,000
2005 Number of Customers 600,000
Volumetric Charge
per Customer \$250.00

Allowed Revenue per Customer (Monthly)

pei ou	istorrici (ii	ionany,
	Test Year	Forecasted Allowed
January	\$ 24.61	\$ 22.81
February	\$ 23.02	\$ 21.33
March	\$ 18.47	\$ 17.12
April	\$ 20.84	\$ 19.32
May	\$ 22.85	\$ 21.18
June	\$ 22.31	\$ 20.68
July	\$ 19.72	\$ 18.28
August	\$ 21.09	\$ 19.55
September	\$ 25.95	\$ 24.05
October	\$ 27.02	\$ 25.05
November	\$ 17.58	\$ 16.29
December	\$ 26.25	\$ 24.33
Total	\$ 269.71	\$ 250.00

Revenue Decoupling Tariff Example for January 2006

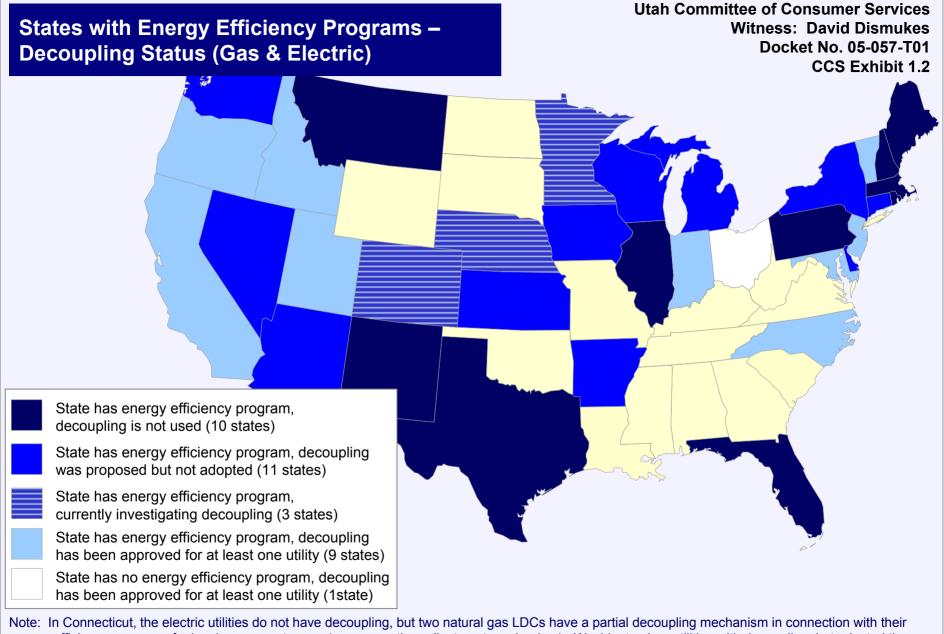
CET Monthly Accrual to Balancing Account	\$264,100
Actual DNG Revenue for Month	\$13,650,000
Allowed DNG Revenue for Month	\$13,914,900
Actual Customers	610,000
Allowed DNG Revenue per Customer	\$ 22.81

Monthly Bill

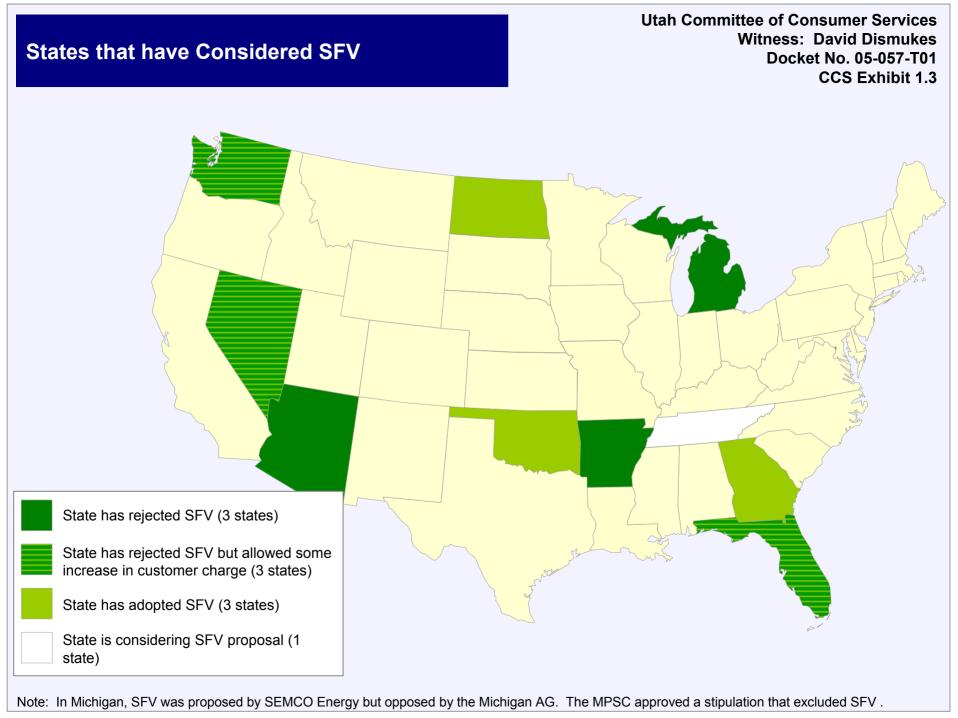
New Monthly Charge

\$0.433

\$23.24



energy efficiency programs for low-income customers (a conservation adjustment mechanism). Washington has utilities with decoupling, but rejected the most recent utility proposal (January 2007). In Michigan, revenue decoupling was proposed by the Michigan Staff but opposed by the Michigan AG. The MPSC approved a stipulation that excluded revenue decoupling. In Kansas, revenue decoupling was proposed by Aquila. The parties involved agreed to a stipulation that excluded revenue decoupling while the Commission investigates it further in a general docket.



Information on Comprehensive DSM Programs Implemented by Ten Gas Utilities in 2004

Utah Committee of Consumer Services
Witness: David Dismukes
Docket No. 05-057-T01
CCS Exhibit 1.4

	Program Spending (million \$)	Percent of Retail Revenues (%)	Gas Savings (Mcf/year)	Percent of Gas Sales Saved (%)	Volume saved per million \$ (Mcf/year)	Benefit- Cost Ratio
Aquila	\$ 2.10	1.4%	146,000	0.5%	69,000	-
Centerpoint	\$ 5.60	0.5%	720,000	0.5%	128,600	2.60
Keyspan	\$ 12.00	1.0%	490,000	0.4%	41,000	3.00
Northwest Natural Gas	\$ 4.70	0.7%	85,000	0.1%	18,000	-
NSTAR	\$ 3.90	0.8%	71,500	0.2%	18,000	2.29
PG&E	\$ 13.50	0.4%	2,000,000	0.7%	148,000	2.10
PSE	\$ 3.80	0.4%	311,000	0.5%	82,275	1.93
SoCal Gas	\$ 21.00	0.6%	1,100,000	0.3%	52,000	2.67
Vermont Gas	\$ 1.10	1.6%	57,000	1.0%	52,000	5.60
Xcel Energy (MN)	\$ 4.00	0.7%	663,000	0.9%	166,000	1.56

Source: Direct Testimony of Howard Geller on behalf of Southwest Energy Efficiency Project and Utah Clean Energy, January 23, 2006.

DSM Savings as Share of Total Sales

Utah Committee of Consumer Services
Witness: David Dismukes
Docket No. 05-057-T01
CCS Exhibit 1.6

	Estimated	Natural Gas	Savings	Estimated Nas a Perd	Natural Gas cent of GS1	
	Year 1	Year 2 (Dth)	Year 3	Year 1	Year 2 (%)	Year 3
Residential						
Residential Appliance Program ENERGY STAR® New Homes	56,183	56,183	56,183	0.063%	0.062%	0.061%
Program Residential Home Energy Audit	81,095	81,095	81,095	0.091%	0.090%	0.088%
and Weatherization Program Commercial	12,989	18,108	19,364	0.015%	0.020%	0.021%
Commercial Rebate Program	13,234	26,107	33,090	0.015%	0.029%	0.036%
Total Estimated Savings	163,501	181,493	189,731	0.184%	0.200%	0.205%

Note: Assumes annual increase in GS1 sales volumes of 2.0 percent.

DSM Participation as Share of Total Customers

Utah Committee of Consumer Services
Witness: David Dismukes
Docket No. 05-057-T01
CCS Exhibit 1.7

	Estimated	DSM Partic	ipation	Estimat as a Percen	ed Particip	
	Year 1	Year 2 (Dth)	Year 3	Year 1	Year 2 (%)	Year 3
Residential						
Residential Appliance Program ENERGY STAR® New Homes	15,499	15,499	15,499	1.944%	1.882%	1.821%
Program Residential Home Energy Audit	8,605	8,605	8,605	1.079%	1.045%	1.011%
and Weatherization Program Commercial	4,881	6,636	6,838	0.061%	0.107%	0.804%
Commercial Rebate Program	487	884	1,099	3.697%	3.840%	0.129%
Total Estimated Participation	29,472	31,624	32,041	3.697%	3.840%	3.766%

Note: Assumes annual increase in GS1 customers of 3.3 percent.

DSM Lost Revenue as Share of Total Revenues

Utah Committee of Consumer Services
Witness: David Dismukes
Docket No. 05-057-T01
CCS Exhibit 1.8

	Estima	ated Lost Rev	enue	Estimated as a Percent	Lost Rever	
	Year 1	Year 2 (\$)	Year 3	Year 1	Year 2 (%)	Year 3
Residential						
Residential Appliance Program ENERGY STAR® New Homes	\$ 99,148	\$ 99,148	\$ 99,148	0.05%	0.04%	0.04%
Program Residential Home Energy Audit	\$ 143,112	\$ 143,112	\$ 143,112	0.07%	0.06%	0.06%
and Weatherization Program Commercial	\$ 22,923	\$ 31,957	\$ 34,172	0.01%	0.01%	0.01%
Commercial Rebate Program	\$ 23,355	\$ 46,073	\$ 58,394	0.01%	0.02%	0.03%
Total Estimated Lost Revenue	\$ 288,537	\$ 320,289	\$ 334,826	0.13%	0.14%	0.14%

Note: Assumes annual increase in GS1 revenues of 3.2 percent. Lost revenues are valued at \$1.76/Dth.

Financial Impact of Net Lost Revenues

Utah Committee of Consumer Services Witness: David Dismukes Docket No. 05-057-T01 CCS Exhibit 1.9

	Cha	ange in Reven	ue	ln	come Impac	t		
	Use per Customer	DSM	New Customers	Use per Customer	DSM	New Customers	Shareholders Equity	· ·
2007	\$ (1,971,361)	\$ (288,537)	\$ 7,052,203	\$ (1,221,185)	5 (178,738)	\$ 4,368,579	\$ 313,071,056	0.95%
2008	\$ (2,905,519)	\$ (608,826)	\$ 6,391,367	\$(1,799,862) \$	377,145)	\$ 3,959,215	\$ 339,501,229	0.52%
2009	\$ (4,485,340)	\$ (943,652)	\$ 6,213,829	\$ (2,778,502)	5 (584,557)	\$ 3,849,237	\$ 363,965,179	0.13%
Total	\$ (9,362,220)	\$ (1,841,015)	\$ 19,657,399	\$ (5,799,549)	5 (1,140,440)	\$ 12,177,031	Net Impact:	1.61% \$ 5,237,041.80

Note: Revenue impacts are valued at \$1.76/Dth for DSM and use per customer. Revenue impacts for new customers are valued at \$2.47/Dth; a figure calculated using 2006 total GS1 revenue divided by 2006 GS1 usage.

Utah Committee of Consumer Services
Witness: David Dismukes
Docket No. 05-057-T01
CCS Exhibit 1.10

Changes in total usage can be decomposed between:

Usage attributable to a change in use per customer (existing customers)

Usage attributable to growth in new customers

$$\Delta Q_{t} = \left(\frac{Q_{t}}{C_{t}} - \frac{Q_{t-1}}{C_{t-1}}\right) \times C_{t-1} + \left(\frac{Q_{t}}{C_{t}}\right) \times C_{t} - C_{t-1}$$

Where:

C = customers

 C_{t-1} = prior period customers

C_t = current period customers

 Q_t/C_t = current period use per customer

 Q_{t-1}/C_{t-1} = prior period use per customer

Estimated Impacts on Usage – Changes in Use per Customer and Changes in Customer Growth

	Average Number of Customers GS1	GS1 Usage per Customer (Dth/Cust)	Temperature Adjusted GS1 Usage (Dth)	Change in Use Decreased Average Use Existing Customers (Dth)	Change in Use Increased Number of New Customer (Dth)	Net Change (Dth)
2001	677,423	118.97	80,593,150			
2002	695,399	115.84	80,555,994	(2,119,521)	2,082,365	(37,156)
2003	724,006	118.90	86,083,445	2,126,113	3,401,338	5,527,451
2004	747,066	114.10	85,242,116	(3,472,533)	2,631,204	(841,328)
2005	778,414	112.88	87,864,443	(916,118)	3,538,444	2,622,326
2006	797,215	111.40	88,810,678	(1,148,163)	2,094,399	946,235
				1	Net Period Change	8,217,528
					Total Decrease	(878,484)
					Total Increase	9,096,013
				1	Net Period Change	8,217,528
				Avera	age Period Change	1,643,506

Estimated Impacts on Revenue – Changes in Use per Customer and Changes in Customer Growth

	Average	GS1	Temperature Adjusted		Revenue Impact							
	Number of Customers GS1	Usage per Customer (Dth/Cust)	GS1 Use pustom (Dth)				Customers (\$)	Total				
2001	677,423	118.97	80,593,150									
2002	695,399	115.84	80,555,994	\$	(2,809,677)	\$	4,901,965	\$	2,092,288			
2003	724,006	118.90	86,083,445	\$	9,594,665	\$	8,195,686	\$	17,790,351			
2004	747,066	114.10	85,242,116	\$	(2,098,515)	\$	6,539,675	\$	4,441,159			
2005	778,414	112.88	87,864,443	\$	(4,623,071)	\$	8,696,110	\$	4,073,039			
2006	797,215	111.40	88,810,678	\$	(2,110,924)	\$	5,164,380	\$	3,053,456			

Summary Financial Impact of Changes in Use per Customer and Customers, 2001-2006

	2001	2002	2003	2004	2005	2006
Return on Equity Allowed ROE	11.00%	11.00%	11.20%	11.20%	11.20%	11.20%
ROE Impact of Change in Use per Customer	0.00%	-0.60%	1.99%	-0.41%	-0.87%	-0.41%
ROE Impact Change in Customers	0.00%	1.04%	1.66%	1.17%	1.51%	1.51%
ROE Impact Change in Expenses Rate Base and Capital Elements	-0.54%	-2.38%	-3.76%	-1.92%	-1.16%	-2.08%
Actual Achieved ROE	10.46%	9.06%	11.09%	10.05%	10.68%	10.22%

Financial Impact of Change in Use per Customer, 2001-2006

Actual Return on Rate Base

Incremental Impact Return on Rate Base

Incremental Impact Return on Equity

Actual Return on Equity

Docket No. 05-057-T01 CCS Exhibit 1.13 Page 2

Witness: David Dismukes

Utah Committee of Consumer Services

			uris	diction DNG Re	late				
Description	2001	2002		2003		2004	2005		2006
Itility Operating DNG Revenue									
System Distribution Non-Gas Revenue	\$ 200,696,764	\$ 204,279,049	\$	218,434,068	\$, - ,	\$ 228,246,882	\$ 2	218,989,82
General Related Other Revenue	11,123,598	11,443,447		5,130,380		5,177,571	6,535,759	\$	6,913,52
	\$ 211,820,362	\$ 215,722,496	\$	223,564,448	\$	229,960,533	\$ 234,782,641	\$ 2	225,903,35
Revenue Impact Declining Usage	\$ -	\$ (2,809,677)	\$	9,594,665	\$	(2,098,515)	\$ (4,623,071)	\$	(2,110,92
Itility Operating Expenses									
Sas Purchase Expenses									
Utah Gathering & CO2	\$ 12,006,619	\$ 12,622,788	\$	8,298,154	\$	8,977,154	\$ 8,460,107	\$	-
Total Gathering & CO2	\$ 12,006,619	\$ 12,622,788	\$	8,298,154	\$	8,977,154	\$ 8,460,107	\$	-
peration and Maintenance Expenses									
Production	\$ (1,214,912)	\$ (745,152)	\$	(1,010,739)	\$	(1,203,294)	\$ (1,352,503)	\$	(1,691,90
Distribution	30,365,590	37,720,970		39,644,134		36,869,734	40,254,743		44,593,77
Customer Accounts	14,255,577	15,232,585		26,204,678		23,751,948	22,384,076		21,952,51
Customer Service & Information	2,013,500	1,860,122		2,445,531		2,443,979	2,288,424		2,430,68
Administrative & General (1)	48,294,087	38,236,483		26,152,843		35,666,505	33,127,149		40,068,20
Total O&M Expense	\$ 93,713,842	\$ 92,305,008	\$	93,436,447	\$	97,528,872	\$ 96,701,888	\$ '	107,353,26
Other Operating Expenses									
Depreciation, Depletion, Amortization	\$ 34,548,652	\$ 38,409,553	\$	38,687,066	\$	41,599,371	\$ 44,205,272	\$	35,729,14
Taxes Other Than Income Taxes	8,895,086	8,983,426		9,409,773		9,417,462	10,667,038		11,238,60
Income Taxes	17,089,113	14,906,109		23,521,025		19,219,402	19,638,723		19,805,84
South Georgia Amortization	1,407,363	1,431,437		1,435,745		-	-		-
Section 29 Tax Credits	(2,650,483)	-		224		-	-		-
Total Other Operating Expenses	\$ 59,289,732	\$ 63,730,526	\$	73,053,834	\$	70,236,235	\$ 74,511,034	\$	66,773,60
Total Utility Operating Expenses	\$ 165,010,193	\$ 168,658,322	\$	174,788,434	\$	176,742,261	\$ 179,673,028	\$	174,126,86
IET OPERATING INCOME	\$ 46,810,169	\$ 44,254,496	\$	58,370,678	\$	51,119,757	\$ 50,486,541	\$	49,665,56
OTAL RATE BASE	\$ 505,674,144	\$ 539,520,097	\$	549,428,512	\$	600,068,706	\$ 595,177,075	\$ 6	601,477,21
djusted Return on Rate Base	9.26%	8.20%		10.62%		8.52%	8.48%		8.26
Adjusted Return on Equity	10.46%	8.46%		13.08%		9.64%	9.81%		9.81

8.52%

9.06%

-0.32%

-0.60%

9.55%

11.09%

1.07%

1.99%

8.73%

10.05%

-0.22%

-0.41%

8.96%

10.68%

-0.48%

-0.87%

8.47%

10.22%

-0.22%

-0.41%

9.26%

10.46%

0.00%

0.00%

Financial Impact of Change in Customers, 2001-2006

Utah Committee of Consumer Services
Witness: David Dismukes
Docket No. 05-057-T01

CCS Exhibit 1.13 Page 3

		Utah .	Juris	diction DNG Re	elate	d		
Description	2001	2002		2003		2004	2005	2006
Utility Operating DNG Revenue								
System Distribution Non-Gas Revenue	\$ 200,696,764	\$ 204,279,049	\$	218,434,068	\$	224,782,962	\$ 228,246,882	218,989,828
General Related Other Revenue	 11,123,598	11,443,447		5,130,380		5,177,571	6,535,759	6,913,523
	\$ 211,820,362	\$ 215,722,496	\$	223,564,448	\$	229,960,533	\$ 234,782,641	\$ 225,903,351
Revenue Impact Customer Growth	-	\$ 4,901,965	\$	8,195,686	\$	6,539,675	\$ 8,696,110	\$ 5,164,380
Utility Operating Expenses								
Gas Purchase Expenses								
Utah Gathering & CO2	\$ 12,006,619	\$ 12,622,788	\$	8,298,154	\$	8,977,154	\$ 8,460,107	\$ -
Total Gathering & CO2	\$ 12,006,619	\$ 12,622,788	\$	8,298,154	\$	8,977,154	\$ 8,460,107	\$ -
Operation and Maintenance Expenses								
Production	\$ (1,214,912)	\$ (745,152)	\$	(1,010,739)	\$	(1,203,294)	\$ (1,352,503)	(1,691,906)
Distribution	30,365,590	37,720,970		39,644,134		36,869,734	40,254,743	44,593,770
Customer Accounts	14,255,577	15,232,585		26,204,678		23,751,948	22,384,076	21,952,512
Customer Service & Information	2,013,500	1,860,122		2,445,531		2,443,979	2,288,424	2,430,687
Administrative & General	 48,294,087	38,318,997		26,143,750		35,726,973	33,232,370	40,084,877
Total O&M Expense	\$ 93,713,842	\$ 92,387,523	\$	93,427,354	\$	97,589,339	\$ 96,807,109	\$ 107,369,940
Other Operating Expenses								
Depreciation, Depletion, Amortization	\$ 34,548,652	\$ 38,409,553	\$	38,687,066	\$	41,599,371	\$ 44,205,272	\$ 35,729,146
Taxes Other Than Income Taxes	8,895,086	8,983,426		9,409,773		9,417,462	10,667,038	11,238,606
Income Taxes	17,089,113	17,808,596		22,992,122		22,483,542	24,667,124	20,602,475
South Georgia Amortization	1,407,363	1,431,437		1,435,745		-	-	0
Section 29 Tax Credits	 (2,650,483)	-		224		-	-	0
Total Other Operating Expenses	\$ 59,289,732	\$ 66,633,012	\$	72,524,931	\$	73,500,376	\$ 79,539,434	\$ 67,570,227
Total Utility Operating Expenses	\$ 165,010,193	\$ 171,643,323	\$	174,250,439	\$	180,066,869	\$ 184,806,650	\$ 174,940,167
NET OPERATING INCOME	\$ 46,810,169	\$ 48,981,138	\$	57,509,696	\$	56,433,339	\$ 58,672,100	\$ 56,127,564
TOTAL RATE BASE	\$ 505,674,144	\$ 539,520,097	\$	549,428,512	\$	600,068,706	\$ 595,177,075	601,477,213
Adjusted Return on Rate Base	9.26%	9.08%		10.47%		9.40%	9.86%	9.33%
Adjusted Return on Equity	10.46%	10.10%		12.76%		11.22%	12.19%	11.73%
Actual Return on Rate Base	9.26%	8.52%		9.55%		8.73%	8.96%	8.47%
Actual Return on Equity	10.46%	9.06%		11.09%		10.05%	10.68%	10.22%
Incremental Impact Return on Rate Base	0.00%	0.56%		0.92%		0.67%	0.90%	0.86%
Incremental Impact Return on Equity	0.00%	1.04%		1.66%		1.17%	1.51%	1.51%
Allowed Return on Equity	11.00%	11.00%		11.20%		11.20%	11.20%	11.20%

Questar Average and Incremental Investment Trends

			DNG Related							
Description		2001		2002		2003		2004	2005	2006
Rate Base	\$ 505	5,674,144	\$ 53	9,520,097	\$ 5	549,428,512	\$	600,068,706	\$ 595,177,075	\$ 601,477,213
Change in Rate Base			\$ 3	3,845,953	\$	9,908,416	\$	50,640,194	\$ (4,891,631)	\$ 6,300,138
Average Customers		694,363		712,651		731,752		754,960	786,740	823,916
Change in Customers				18,288		19,101		23,208	31,780	37,176
Incremental Rate Base Cost Per Customer			\$	1,851	\$	519	\$	2,182	\$ (154)	\$ 169
Average Rate Base Cost per Customer	\$	728	\$	757	\$	751	\$	795	\$ 757	\$ 730
Net Utility Plant in Service	\$ 580	0,037,119	\$ 62	0,793,377	\$ 6	550,036,512	\$	705,080,214	\$ 719,756,346	740,424,646
Change in Net Utility Plant in Service			4	0,756,258		29,243,135		55,043,702	14,676,132	20,668,300
Average Customers		694,363		712,651		731,752		754,960	786,740	823,916
Change in Customers				18,288		19,101		23,208	31,780	37,176
Incremental Net Utility Plant Cost Per Cust	omer		\$	2,229	\$	1,531	\$	2,372	\$ 462	\$ 556
Average Net Utility Plant Cost per Customer	\$	835	\$	871	\$	888	\$	934	\$ 915	\$ 899

Example of Revenue Decoupling - Corrected

Revenue Decoupling Tariff Example for January 2006						
Allowed DNG Revenue per Customer	\$ 22.81					
Actual Customers	610,000					
Allowed DNG Revenue for Month	\$13,914,900					
Actual DNG Revenue for Month	\$13,650,000					
CET Monthly Accrual to Balancing Account	\$264,100					
Accrual Added to Monthly Bill	\$0.433					
New Monthly Charge	\$23.24					

Revenue Decoupling Tariff Example for January 2006	
Allowed DNG Revenue per Customer \$ 22.81	
Actual Customers 600,000	
Allowed DNG Revenue for Month \$13,686,000	
Actual DNG Revenue for Month \$13,650,000	
CET Monthly Accrual to Balancing Account \$36,000	
Accrual Added to Monthly Bill \$0.06	
New Monthly Charge \$22.87	

Overview of Third-Party Administrators

Oregon

Utah Committee of Consumer Services Witness: David Dismukes Docket No. 05-057-T01 xhibit 1.16

		CCS Exhibit 1.16
State	Overview	
Maine	20% of funds must support energy programs	PUC is known as Efficiency Maine. By statute, at least for low-income residents, and at least 20% of funds must customers. The PUC assesses utilities to collect funds for
New Jersey	in energy efficiency and renewable energy. The Administered by the New Jersey BPU. The Note information and education for all classes of reprograms were initially managed and implemental transferred to a third-party program manager.	n created a "societal benefits charge" to support investments the SBC funds New Jersey's Clean Energy Program, JCEP provides technical and financial assistance, atepayers. NJCEP energy-efficiency and renewable-energy ented by the state's IOUs and LDCs, but these are being at the BPU will act as the administrator of the NJCEP, while sible for managing and implementing these programs.

The Energy Loan Fund provides incentives for energy efficiency, distributed energy and renewableenergy projects. The ELF will collect \$100 million over 10 years from Ohio's four investor-owned utilities to provide low-interest loans for energy-efficiency improvements at residential, government, Ohio educational, commercial, industrial and agricultural facilities. It also provides funding for renewable-

> In 2002 the Oregon PUC authorized the Energy Trust of Oregon (independent non-profit), to administer the utility's renewable energy and energy efficiency projects. Of the funds collected, 67% must be allocated towards energy efficiency programs and 17% to renewables. The remaining support low-income housing energy assistance and school energy-conservation efforts. In addition, the Energy Trust administers gas conservation programs for residential and commercial customers of Northwest Natural and Cascade Natural Gas Corporation, and select programs for residential customers of Avista Corporation.

energy projects. The Ohio Department of Development's Office of Energy Efficiency operates the fund.

Utah Committee of Consumer Services
Witness: David Dismukes
Docket No. 05-057-T01
CCS Exhibit 1.17

			Repression Analysis for GS-1				
		5	-Year Average	3	3-Year Average		
1	Repression Impact per Residential Customer (Dth)		(1.52)		(0.99)		
2	Residential Sales (Dth)	\$	88,692,051	\$	88,692,051		
3	Residential Customers		785,746		785,746		
4	Residenital Sales Impact of Repression (Dth)		(1,197,077)		(776,622)		
5	Residenital Non-Gas Revenue	\$	215,936,372	\$	215,936,372		
6	Customer Charge	\$	(3,928,730)	\$	(3,928,730)		
7	Res Non-Gas Revenue Less Customer Charge	\$	212,007,642	\$	212,007,642		
8	Res Non-Gas Revenue Per Dth	\$	2.39	\$	2.39		
9	Revenue Impact of Repression	\$	(2,861,468)	\$	(1,856,421)		
10	Uncollectibles	\$	12,276	\$	7,964		
11	Net Revenue Impact of Repression	\$	(2,873,744)	\$	(1,864,385)		
12	Combined Tax Rate		36.2%		36.2%		
13	Combined Taxes	\$	1,041,157	\$	675,467		
14	Net Operating Income Impact of Repression	\$	(1,832,586)	\$	(1,188,918)		

Note: Assumes a customer charge of \$5.00. The source of this is the current GS-1 tariff at: http://www.questargas.com/Tariffs/uttariff.pdf. Assumes an uncollectible rate of 0.4 percent.